

**Homework 19**  
**Calculus II**

**Due April 20, 2026**  
**Prof. Nollet**

A sequence  $\sum a_n$  converges *conditionally* if it converges, but does not converge absolutely.

Section 9.6 # 20, 21, 24, 33

Section 9.7 # 5a, 11a, 14a, 17a, 26a, 27a, 53, 56ab

Hints:

§9.6 #20 ratio test.

#21. AST for series and integral test for absolute series.

#24. Ratio test.

#25. Ratio test

§9.7 # 5. Series is geometric

#14. Use AST for left endpoint,  $p$ -series for right endpoint.

#17. Use  $n$ th term test on both endpoints.

#27. Check right endpoint with AST, left with  $p$ -series.

#53. Similar to an example for class.

#56. Term by term differentiate and integrate.